Canadian Forces Addictions Awareness and Prevention Strategy

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1.0 INTRODUCTION

In 2002, as part of the restructuring to improve health care delivery in the Canadian Forces (CF), the health promotion program, Strengthening the Forces (STF), was enhanced within the CF Health Services' Directorate of Force Health Protection (DFHP) which included an addictions awareness and prevention (AAP) component. In March 2008, the Chief of Defense Staff (CDS) officially launched a CF Health and Physical Fitness Strategy which advocates for an addiction-free lifestyle. Based on best practices and the Ottawa Charter for Health Promotion's priority action areas, the AAP section developed a comprehensive strategy in four program areas, specifically, alcohol, use of other drugs, gambling and tobacco use. Key addictions awareness and prevention activities are discussed and the current program evalution framework is presented.

2.0 BACKGROUND

Health promotion is "the process of enabling people to increase control over, and to improve their health" (Ottawa Charter for Health Promotion, 1986). STF uses this model when developing strategies to address health concerns of the CF. This model consists of five pillars of health promotion practices: building healthy public policy; creating supportive environments; strengthening community actions; developing personal skills; and reorienting health serivices (Ottawa Charter for Health Promotion, 1986).

STF programs address primary prevention by adopting a population health approach and by pursuing programming with demonstrated efficacy. STF offers programs in injury prevention and active living, nutritional wellness, addictions awareness and prevention, and social wellness. STF program specialists are responsible for policy and program development, program implementation, training and professional development and evaluation STF activities. Programs are targeted at the establishment of healthy work environments and the development of skills to enable CF personnel to maintain and improve their health; the health promotion activities are not positioned to address clinical health conditions.

A unique component of the STF program is the service delivery of the health promotion program. The programs are delivered on the local bases and wings by Director General Personnel Family Support and

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Service (DGPFSS) staff through a formal service delivery arrangement. Health Promotion Delivery (HPDel) staff are trained by STF specialists in the four program areas and offered ongoing support and subject matter expertise. In addition, CF military personnel and Department of National Defence (DND) civilian staff, are also offered this training to support the delivery of the addiction awareness and prevention programming and to build the CF's capacity to provide health promotion to its members

Addictions awareness and prevention is the promotion of an addiction-free lifestyle and supports mental health, well-being, and the operational readiness of the CF. In 2004, a literature and best practices review of primary prevention in addictions (Moloughney, 2004) was conducted for STF. It recommended that the CF implement a multi-faceted, comprehensive strategy and that single, time-limited efforts or reliance solely on educational interventions would have little, if any impact. This strategy would include education programs focused on building awareness of policies, have a skill building component as well as transfer of knowledge that are based on interactive adult learning theory, include policies to reduce addictions related harms, and have social marketing/mass media campaigns to begin to shift toward more desirable social norms of lower risk drinking behaviours, stopping tobacco use, etc.

As a result, efforts have focused on implementing a comprehensive strategy for the primary prevention of alcohol misuse in the CF and ensuring that educational activities focus on generating awareness about CF policies and guidelines are based on interactive adult learning theory; an addictions awareness campaign and a tobacco cessation "I Quit Challenge" are carried out each year as well as working to promote policies that reduce addictions related harms in the CF.

The CF Health and Physical Fitness Strategy, with its motto: "Healthy and fit for life" has the long-term goal to establish a culture of health and physical fitness in the CF where people take their health seriously and choose a lifestyle dedicated to eating well, engaging in regular physical fitness activities, maintaining a healthy weight and living an addiction free lifestyle. The CF Health and Physical Fitness Strategy promotes an addiction-free work environment as one of its lines of operation.

3.0 OVERVIEW OF ALCOHOL, OTHER DRUGS, GAMBLING AND TOBACCO USE AND COST IN THE CF

The Canadian Centre for Substance Abuse (CCSA) has estimated the health, social and economic costs associated with alcohol, tobacco and illicit drugs in Canada for 2002 (Rehm et al., 2006). The overall cost of substance abuse in Canada in 2002 was estimated to be $39.8 billion. The number is broken into four major categories: productivity loss $24.3 (61%); direct health care costs 48.8 billion (22%); direct law enforcements costs $5.4 billion (14%); and other direct costs $1.3 billion (3%). This overall estimate represents a cost of $1267 to every man, woman and child in Canada . It is interesting to note that tobacco accounted for $17 billion, alcohol accounted for $14.6 billion and illegal drug use accounted for the remaining $8.2 billion (Rehm et al, 2006).

A 2010 report reviewed the leading causes of deaths in the Canadian military between January 1983, to December 2007 found that approximately 35% of all deaths were attributable to potentially modifiable behaviours, which include: suicide (219 non–alcohol-related deaths, 13%); smoking (159 deaths, 9%); and alcohol use (186 deaths, 11%) (Tien et al., 2010). The report called for continued support to offer comprehensive health promotion programming as well as addressing organizational or culture change.

Alcohol was listed as the most frequently used drug in the CF. Results from the 2008/09 CF Health and Lifestyle Information Survey (HLIS) indicate that close to 93% of CF members drink alcohol, with 46%

exceeding the recommended daily limit of 2 standard drinks per day. In addition, 72% of CF members report binge drinking, and 20% report a score of 8 or more on the WHO Alcohol Use Disorders Identification Test (AUDIT), which indicates a high probability of hazardous drinking. When you compare the data from the HLIS 2004 report, while there has been a slight decrease in the numbers of members drinking, binge drinking and hazardous drinking has increased (Figure 1).

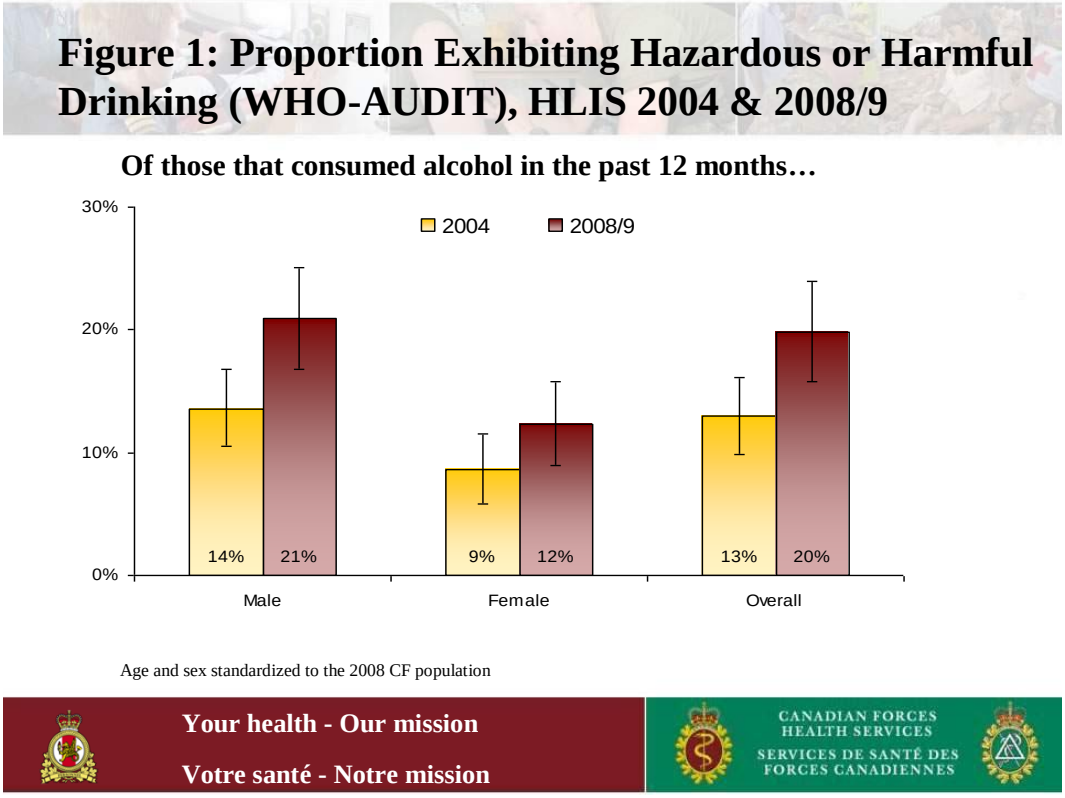

Figure 1: Proportion Exhibiting Hazardous or Harmful Drinking (WHO-AUDIT), HLIS 2004 & 2008/9.

In terms of non-medicinal use of other drugs in the CF, such as illegal drugs, and the non-medicinal use of prescription and over the counter drugs, the survey found that 87% CF personnel reported no use at all in the past 12 months while 80% reported never using illegal drugs in their lifetime and 18% reported using less since joining the CF. Of those CF members that reported illicit drug use, 10% reported using one type of drug in the past 12 months, 2.5% reported using two or more non-medicinal drugs, 3% reported marijuana or hashish and 17% reported having worked with a member known to be taking drugs in garrison or on exercise. In terms of non-prescription medication/over-the-counter, the two most commonly consumed were pain relievers 76% and cough/cold remedies 63%.

The HLIS 2008/09 also asked questions on gambling behavoiur in the CF. The survey reported that 83% CF members participated in some type of gambling in the past 12 months with lotteries listed as the most popular followed by instant win/scratch tickets. The frequency of problem gambling reported among personnel was 0.6% using the Problem Gambling Severity Index (PGSI), from the Canadian Problem Gambling Index (CPGI).(Canadian Centre on Substance Abuse, 2001).

Finally, in terms of tobacco use, the 2008/09 HLIS survey reported that less than one quarter of CF personnel are smokers and there has been an overall decrease in daily and occasional smoking between 2004 and 2008/09 in the CF population, (Figure 2).

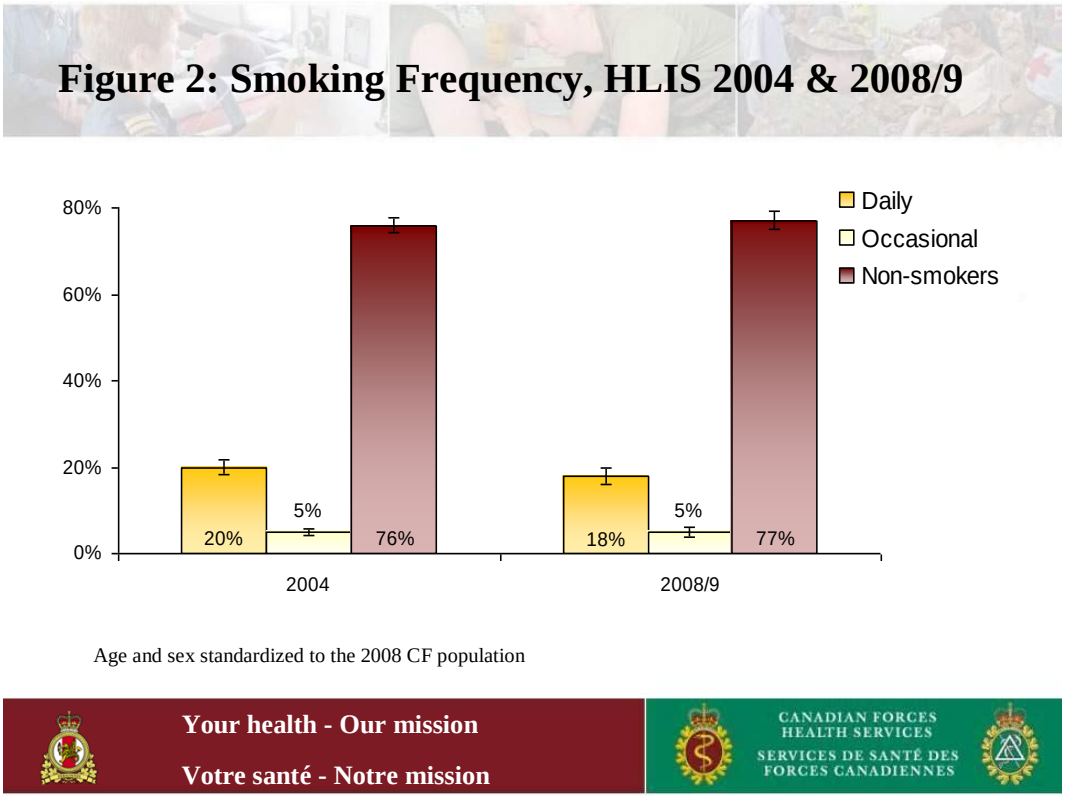

Figure 2: Smoking Frequency, HLIS 2004 & 2008/9.

An ongoing concern is those members who reported using tobacco products after joining the CF; 24.5% stated that they started smoking after they joined the CF: 45% of those at basic training and 80% of CF smokers have increased or re-started smoking since joining the CF: 43% while on deployment. These numbers are illustrated in the figure 3.

Figure 3: Smoking Initiation After Joining the CF and Times when Smoking was Re-started or Increased, HLIS 2008/9

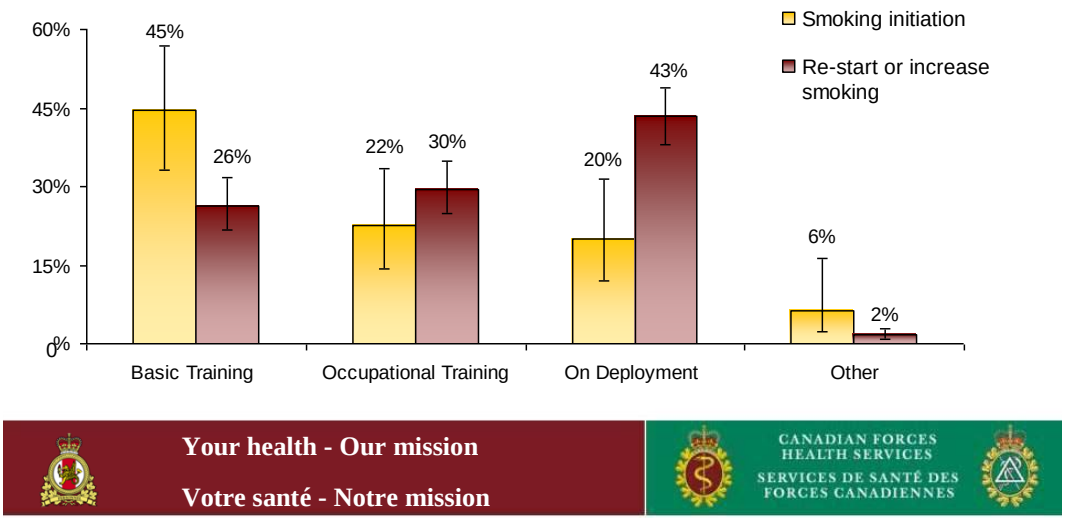

Figure 3: Smoking Initiation After Joining the CF and Times when Smoking was Re-started or Increased, HLIS 2008/9.

The HLIS 2008/09 report estimated that if smoking initiation following enrolment in the CF were eliminated, there would be 3,383 fewer daily or occasional smokers currently enrolled in the CF, and the overall prevalence of smoking would be reduced to 17.5%.

4.0 ADDICTIONS AWARENESS AND PREVENTION STRATEGY

Based on best practices and following the five pillars of health promotion, the Addictions Awareness and Prevention section of STF developed a comprehensive strategy in four program areas, specifically, alcohol, use of other drugs, gambling and tobacco use.

The CF has adopted a harm reduction approach to prevent and reduce harm associated with alcohol use. A harm reduction approach accepts that a continuing level of alcohol use is inevitable and defines objectives as minimizing the adverse health, social, and economic consequences of alcohol use (Hobden, & Cunningham, 2006). To promote responsible drinking practices, the CF uses the Low Risk Drinking Guidelines (LRDG) (Bondy et al., 1999)) published by the Canadian Centre for Addiction and Mental Health (CAMH). The LRDG are evidence-based guidelines that recommend daily and weekly drinking limits to maintain low risk for alcohol related problems[1]. The objective within the STF Addiction Strategy is to increase awareness of LRDG in the CF and to increase awareness of alcohol and other drugs prevention resources in the CF.

[1] Zero drinks for lowest risk; no more than 2 drinks on any one day; and a maximum of 9 drinks per week for women and 14 drinks per week for men. Measurements are based on standard drink sizes of 12 oz. of beer, 5 oz. of wine or 1.5 oz. of spirits.

Because of the implications regarding operational readiness, safety, job performance, absenteeism, liability, and the public image of the CF, it is CF policy that the use of illegal drugs and the misuse of prescription and over the counter (OTC) drugs are not tolerated[2]. In accordance with its Drug Control Policy (DAOD 5019-3), the CF is committed to an impairment-free workforce by providing the appropriate tools and information to reduce or eliminate the drug-risk behaviours of CF members. The essential elements of the CF Drug Control Program, established under Chapter 20 of the *Queen's Regulations and Orders for the Canadian Forces* (QR&O), are education, deterrence, and detection, treatment and rehabilitation. Therefore, the objective of the STF Addiction Strategy is to support the education and prevention component through increasing awareness of prevention resources in the CF and to educate CF members on the policy with respect to illicit drugs.

In Canada, gambling operates under the control of provincial and territorial governments; therefore, the legislation may differ from province to province. The objective within the STF Addiction Strategy is to maintain a proactive approach to prevent increased incidence of problem gambling.

Tobacco use affects military fitness levels and performance (Nelson & Pederson, 2008). It has significant adverse impact on the operational capability of the CF by compromising endurance, lung function and blood flow to muscles which increases the risk of personnel being injured during their training. The objective in terms of tobacco cessation is to increase the proportion of non-tobacco users among the CF and increase the proportion of tobacco users attempting to quit.

Logic models have been developed in the four program areas to illustrate the relationship between the key input i.e. resources, activities and the intended short, medium and long term outcomes (Appendix A). To follow is a brief description of the key activities.

4.1 Alcohol, Other Drugs, and Gambling Awareness Program Modules

The Alcohol, Other Drugs and Gambling Awareness Program was released in November 2005. The program was developed under contract with CAMH and consists of 12, two-hour modules. The modules were developed using an interactive, adult learning approach and were designed to be flexible so that the different bases/wings can choose from the various module topics depending on their respective needs and interests. Participants indicate through post course evaluation if there is an increase in knowledge and awareness.

4.2 Facilitator Training (Train-the-Trainer)

In order to deliver the program modules, STF provides annual facilitator training to HPDel staff, CF members and DND civilian employees. To maintain their qualification, these partners (CF members and DND employees) are then required to assist HPDel staff in the delivery of the program modules.

4.3 Alcohol, Other Drugs and Gambling Awareness (AODGA) Supervisor Training

A review of the literature indicates that in order to bring about a change in culture with respect to alcohol use, personnel in middle management and leadership positions should be targeted as they have the most influence on the culture and social norms on the unit level (Moloughney, 2004). This research focused on how workplace culture can be developed to either be supportive of an individual attempting to remain drug free

[2] In accordance with QR& O (Chapter 20, Drug Control Program), a drug means:
(a) a controlled substance as defined in the Controlled Drugs and Substances Act (Statutes of Canada, 1996, Chapter 19); or
(b) any other substance, except for alcohol, the use of which can impair normal psychological or physical functioning and the use of which has been prohibited by the Chief of the Defence Staff

and/or enable behaviours and or attitudes that allow the behaviours to remain unchallenged (Shain et al., 2002). For example, there is a perception that alcohol consumption forms part of the culture of the CF. Unlike most workplaces, alcohol is readily available during working hours at military messes, and due to frequent isolation from community settings, members are more likely to socialize with co-workers when off duty, particularly during deployments and remote postings (Moloughney, 2004).

Supervisor training on alcohol, other drugs and gambling is conducted at the local level through HPDel staff using the trained facilitators, in conjunction with the local CF Addictions Services within the CF Health Service Centres. The supervisor training requires one formal training day. The aim of the supervisor training is to build leadership capacity and prepare personnel in leadership positions to take an active role in the detection and management of alcohol misuse, drug abuse, and gambling problems and to promote an addiction-free environment in the workplace. Upon successful completion of the course, the training results are recorded in the supervisor's personnal file. The training is delivered in accordance with the AODGA Supervisor Training Plan, which governs the conduct and evaluation of the training course and helps to ensure consistency in delivery across the various bases/wings. Practical tests, including case studies, role play in real life scenarios, and group activities are performed throughout the training course to assess the supervisor's acquisition of knowledge and skills.

In early 2009, an updated version of the CF Drug Control Program (DAOD 5019-3) and accompanying Program Manual were released. Recognizing the important role that supervisors can play in the prevention and early detection of substance misuse and/or problem gambling, the revised program and CDS directive (CANFORGEN (043/09)) make it mandatory for CF members in supervisory positions to receive the AODGA Supervisor training. Implementation of mandatory supervisory training has increased enrollment (Table 1) and provided an opportunity to incorporate an evaluation component into the training program. An evalaution is currently underway to assess whether the training is being implemented as planned and to what extent it is achieving the expected outcomes. This process will be discussed later in the paper.

Table 1: AODGA Supervisor Training Enrollment Rates 2006-2010.

Year	Participants
2006	105
2007	269
2008	476
2009	719
2010	1608

4.4 Annual Addictions Awareness Campaign

This campaign has occurred annually during National Addictions Awareness Campaign, the third week of November, since 2005. According to research there is strong evidence to suggest that mass media campaigns can produce positive changes in health-related behaviours especially when it occurs concurrently with the availability of treatment service and programming (Wakefield et al., 2010). Key goals of this campaign is to begin to shift CF social norms toward more desirable norms of lower risk drinking behaviours, no tobacco or drug use and continued low risk gambling practices. It also aims to increase awareness of services available to CF members and their families.

The campaign features promotional items and activities to better educate CF personnel about issues surrounding addictions awareness and prevention, in accordance with an overall Canadian Forces Health and Physical Fitness Strategy. This campaign has also begun to work to increase the use of electronic technologies and media to increase its reach to more CF members, especially the populations who are reporting the most hazardous behaviours: young, single, male, non commissioned members.

In 2010 the campaign slogan was "Our Forces Know…I Know…Do You Know? (When to say I've had enough; when to step in; when and how to ask for help)" and included information and activities about responsible use of alcohol and gambling, low risk drinking guidelines, healthy options for leisure time, as well as a list of resources available to those with substance abuse issues. This slogan reflects the CF's commitment to working together to create an open dialogue about addictions and foster a workplace culture that supports a healthier, addiction free lifestyle. It is also a social norming message, developed to challenge the beliefs of a high risk user and introduce cognitive dissonance by suggesting that the truth is different from what may be popularly thought in that individual's smaller group's norm. These messages can stimulate a process of self-reflection a re-examination of what is normal (Berkowitz, 2004).

4.5 BUTT OUT Tobacco Cessation Program

Butt Out is the CF Tobacco Cessation Program which helps tobacco users build- their skills and confidence to quit using tobacco products. The program is a self-managed change program based on adult learning principles that focuses on the process of quitting. The program helps with physical dependence by referral to CF Health Service Centres to access appropriate medication, and with the learned habit, by helping clients use problem solving to analyse why and when they use tobacco, and to find other things to substitute.

The program was developed specifically for CF personnel in 1980. It was evaluated, and showed one-year quit rates of up to 50% for those who participated actively in the program. The program was subsequently revised and updated in 1995, 2003 and in 2009. Enrollment has steadily increased with the shift to a self help program that was implemented in 2005 (Table 2).

Table 2: Butt Out, Tobacco Cessation Program Enrollment 2007-2010.

Year	Total	Military	Civilians/Family
2007	2096	2041	55
2008	2582	2524	58
2009	3104	3059	45
2010	3604	3581	23

4.6 Inform and Advocate for Integration of Health Promotion into Health Care Services

HPDel staff advocate for, and partner with, CF Health Service Centre professionals to enhance the preventive practices of physicians and other health care providers. Health care providers integrate questions about alcohol and tobacco use behaviour into their routine patient visits and encourage responsible use of alcohol and tobacco cessation.

4.7 March 1st, "I Quit!" Challenge

The annual CF March 1st, "I Quit!" Challenge has been in effect since 2004 and is based on similar " I Quit" programs run in other jurisdictions (Table 3). The Challenge targets tobacco users that are ready to quit and participants are challenged to stay tobacco-free for a one month period. This type of challenge is intended to strengthen the connection between the intention and the actual decision to quit (van Osch et al., 2009). Quit and Win contests are based on the assumptions that: most smokers prefer to quit on their own; after 30 days of abstinence, quitters may remain smoke-free; and that widespread quit attempts may provide a network of support from other smokers trying to quit as well as non-smokers within the community (Cahill & Perera, 2008).

Table 3: March 1st"I Quit !" Challenge Enrolment 2004-2010.

Year	Total	Military	Civilians	Supporters
2004	3369	876	247	2246
2005	3604	915	279	2412
2006	3819	1019	254	2546
2007	3717	955	284	2478
2008	3306	828	274	2204
2009	2958	769	217	1972
2010	3177	834	225	2118

The Challenge is based on the Transtheoretical/Stages of Change (Prochaska & DiClemente, 1983) model that suggests that tobacco users move through 5 stages of change. The challenge currently targets CF personnel, their immediate family members (spouse/partner and children), and DND public, non-public fund and Military Family Resource Centre (MFRC) employees who are tobacco user or former tobacco users who have quit within 6 months before the challenge begins.The rationale was to help motivate recent quitters to stay tobacco-free since relapse rates are greatest during the first few months after quitting. If they succeed in remaining tobacco-free for 30 days, they are eligible to win prizes.

The Challenge also includes supporters. A buddy support system is the most frequently used and appreciated cessation aid, and research indicates that the assistance of supporters consistently predicts successful short-term abstinence (Cahill & Perera, 2008) (van Osch et al, 2009). Supporters must be non-tobacco users who are prepared to provide encouragement toward the goal of quitting, and they are responsible for certifying that the candidate kept his/her commitment not use tobacco for the entire month. The supporters are also eligible to win prizes generously provided by partnership with the CF CANEX and SISIP Financial Services.

4.8 Policy Development Related to Alcohol, Others Drugs, Gambling and Tobacco Use

The DFHP specialists, primarily the Addictions Specialist, participates in the development and amendment of policies related to alcohol, other drugs use, gambling and tobacco use to advocate for the inclusion of health promotion principles. DAOD 5019-7 Alcohol Misconduct DAOD 5019-3, the CF Drug Control Program, was recently amended. One of the major amendments was the requirement for supervisor training for all CF

members in leadership positions (supervisor training). Potential activities include advocating for policies that govern the pricing and availability of alcohol in CF facilities as well as fostering a tobacco-free work environment especially during basic and occupational training courses.

4.9 Research, Surveillance & Evaluation

Research, surveillance and evaluation and ongoing review of best practices are key activities as part of the overall strategy. In addition, every four years the HLIS is conducted by the Epidemiology (EPI) section of DFHP with the CF to collect self-reported data on a variety of lifestyle behaviors including the use of alcohol, other drugs use, gambling and tobacco use. STF works with EPI to develop tools for data collection and complete evaluation of programming activities.

5.0 EVALUATION FRAMEWORK FOR THE ADDICTIONS AWARENESS AND PREVENTION STRATEGY

A key challenge in health promotion is the measurement of program outcomes and the attribution of change. As long-term outcomes are not currently available, the evaluation framework focuses on implementation, reach, and the achievement of short and medium-term outcomes. An evaluation framework was developed for specific program activities and data collection is in progress (Appendix B).

5.1 AODGA Supervisor Training Evaluation Process

In conjunction with pre and post data collection the AODGA Supervisor Training is engaged in a one year follow up to determine long term behaviour change. The Kirkpatrick Model (TKM) is being used to evaluate the effectiveness of this training program (Kirkpatrick, 1996) (Boverie et al., 1995). The model focuses on the following four levels of evaluation specifically: reaction, i.e. were participants (supervisors) satisfied with the training; learning, i.e. to what extent did supervisor knowledge, skills and attitude change as a result of the training; behaviour, i.e. to what extent did participants change their behaviour on the job as a result of the training (transfer of learning) and; results, i.e. what organizational benefits resulted from the training.

This evaluation plan model for the AODGA supervisor training program focuses on Levels 1- 3 as well as on the implementation of the training (Appendix C). Feedback is being collected through an online trainer report form that captures data on number of participants, location and overall feedback from participants. The trainer report forms also captures instructor feedback, which can be used to help improve course delivery.

Preliminary results indicate the participants of the course are mostly: male; ages 40-49; MCPL/MS to CWO/ PO1; and, from the Army (Table 4).

Table 4: Demographics of AODG Supervisor Training Course Attendees.

Characteristic		95% Confidence Interval	
	%	LL	UL
Sex			
Male	75.0	72.8	77.3
Female	25.0	22.7	27.2
Age			
Less than 30	11.6	10.0	13.3
30-39	31.0	28.6	33.4
40-49	45.3	42.7	47.9
50 or more	12.1	10.4	13.7
Rank			
MCPL/MS to CWO/CPO1	70.2	67.8	72.6
OCDT to CAPT/LT(N)	12.2	10.6	13.9
MAJ/LCDR to COL/CAPT(N)	3.7	2.8	4.7
Civilian	9.4	7.9	10.9
*Other	4.4	3.4	5.5
Element			
Air	36.5	34.9	39.1
Sea	17.0	15.0	19.0
Land	46.5	43.9	49.2

**Other consists of: CPL, PTE, LS, CDS, MAT3, PTE MED TECH QL5*

There is a statistically significant increase in mean knowledge score from the pre-test to the post-test [IRR=1.17, ($p<0.001$)] (Table 5).

Table 5: Mean Knowledge Score from the AODG Supervisor Training Course.

Score Type (range from 0-5)	Mean (SD)	N
Pre-test mean knowledge score	3.04 (1.07)	1378
Post-test mean knowledge score	3.57 (0.94)	1364

There was also a statistically significant increase in the proportion reporting 'Good or Very Good' confidence for all 4 confidence items from pre- to post-test (Table 6).

Table 6: Self-Rated Confidence, Pre-Test and Post-Test.

Self-reported Confidence Item	Percent Indicating Better than Average Confidence (Good or Very Good) (95% CI)		p value
	Pre-test	Post-test	
Ability to recognize the warning signs and symptoms of alcohol, other drug use and/or gambling	35.1 (32.7-37.6)	87.9 (86.3-89.6)	<0.001
Awareness of DND policies on alcohol, other drugs and/or gambling	37.6 (35.1-40.1)	83.9 (82.1-85.8)	<0.001
Understanding the role of the supervisor in promoting an addiction-free work environment	40.4 (37.8-42.9)	92.6 (91.2-93.9)	<0.001
Implement strategies to support an addiction-free work environment	18.6 (16.6-20.6)	83.4 (81.5-85.3)	<0.001

A one year follow up is currently underway (Nov 2010 to Oct 2011) to evaluate participant knowledge, skill, and attitude one year after course completion and to determine if there has been a change in behaviour and transfer of learning as a result of the training course.

5.2 CF March 1, "I Quit!" Challenge Evaluation Process

The Challenge has been in effect for 8 years and each year a process evaluation is conducted based on feedback from HPDel staff (note: the process evaluation does not include any feedback from participants). However there has not been a year follow up to determine if the longer term objective that 25% of registrants remain tobacco free for at at least 12 months was achieved.

In 2010 an outcome evaluation was conducted to determine whether the CF 2009 March 1ST, "I Quit!" Challenge is achieving its objectives (Appendices D and E). While accepting the limitations of a low response rate (23.7%), 27% of survey respondents abstained from smoking for the entire year (March 2009 - March 2010). As part of the Challenge members who had quit smoking 6 months prior to the Challenge were eligible to register as well as those planned to quit during the Challenge. Those respondents who had quit in 6 months prior to the Challenge were more successful at 1 year: (60% still tobacco free) than smokers who tried to quit during the Challenge (12% remained tobacco free).

At the time of the one year follow up survey follow up (June - July 2010) respondents were asked about their current smoking status: 19% of respondents had not smoked at all; 36% still smoked, but less than before; 42% still smoked about the same amount as before; and 3% still smoked, more than before the Challenge. Given that this estimate is based entirely on self report, it may be an overestimate (Cahill & Perera, 2008). Additionally, this finding should be interpreted with caution as survey respondents may have been more successful in quitting smoking than non respondents.

Other information collected asked questions of the usefulness of the Challenge to assist in their attempt to quit, the use of prizes and the target reach of the Challenge. Of those who responded to the importance of the

Challenge in their attempt to quit, 28.5% indicated it was very important and 34.9% responded important (Table 7). In terms of the use of prizes 10.8 % indicated very important, 16.1% responded important, while 28.5% felt it was neutral (Table 8). Finally in terms of target reach the Challenge reached 3.7% to 5.3% of the target audience, this is higher than other challenges of it kind that typically have a reach of between 0.5 to 3.5%.

Table 7: Importance of Participation in the March 1st, I Quit Challenge on Attempt to Quit Smoking.

Importance of Challenge	Percent (%)
Very important	28.5
Important	34.9
Neutral	25.8
Not very important	7.5
Not important	3.2

Table 8: Importance of Prizes in the March 1st, I Quit Challenge as a Motivation to Quit Smoking.

Importance of prizes	Percent (%)
Very important	10.8
Important	16.1
Neutral	28.5
Not very important	20.4
Not important	24.2

Data collection limitations included: problems with Internet/NCR-Net survey link not being accessible on personal computers; administration of the survey during posting season and during summer vacation; the emailed survey did not reach 110 of the 790 intended recipients for various reasons; and the short response time. As a result several recommendations have been made to improve data collection and another survey is set for Challenge 2011. These recommendations are hoped to improve the evaluation of this campaign and the evaluation of all health promotion programs as we continue to work to address the challenges of monitoring effectiveness of primary intervention.

6.0 CONCLUSION

Offering evidence-based addictions awareness and prevention programs across the CF provides demonstrated benefits for mental health and well-being as well as operational readiness. STF's military-specific addiction awareness and prevention strategy provides a useful model that may be adopted by other militaries. STF's innovative military-specific additions awareness and prevention programming and the CF HPDel system can provide a model for addictions awareness and prevention that may be adopted by other militaries to support health and performance during times of combat, peacekeeping and humanitarian operations.

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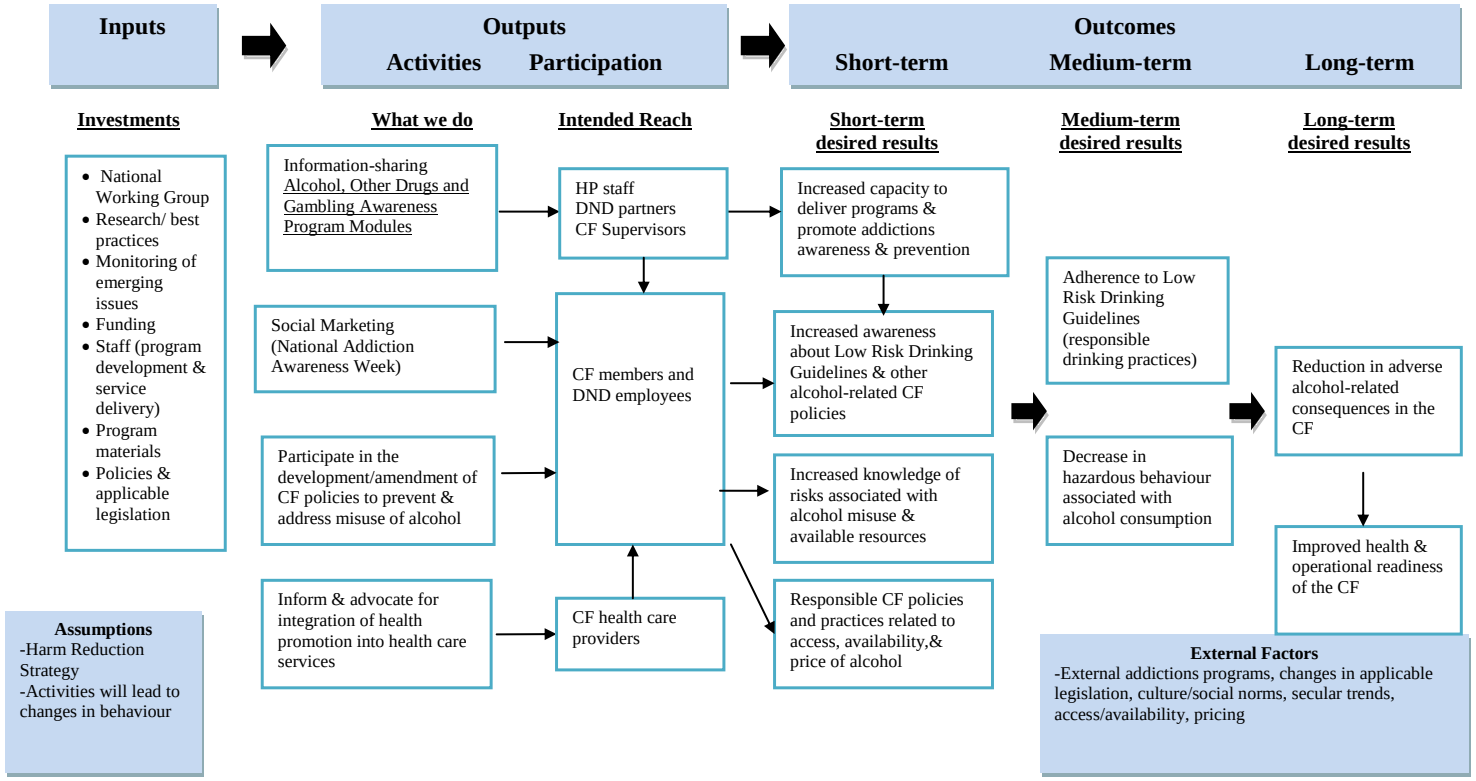
Appendix A: Logic Models

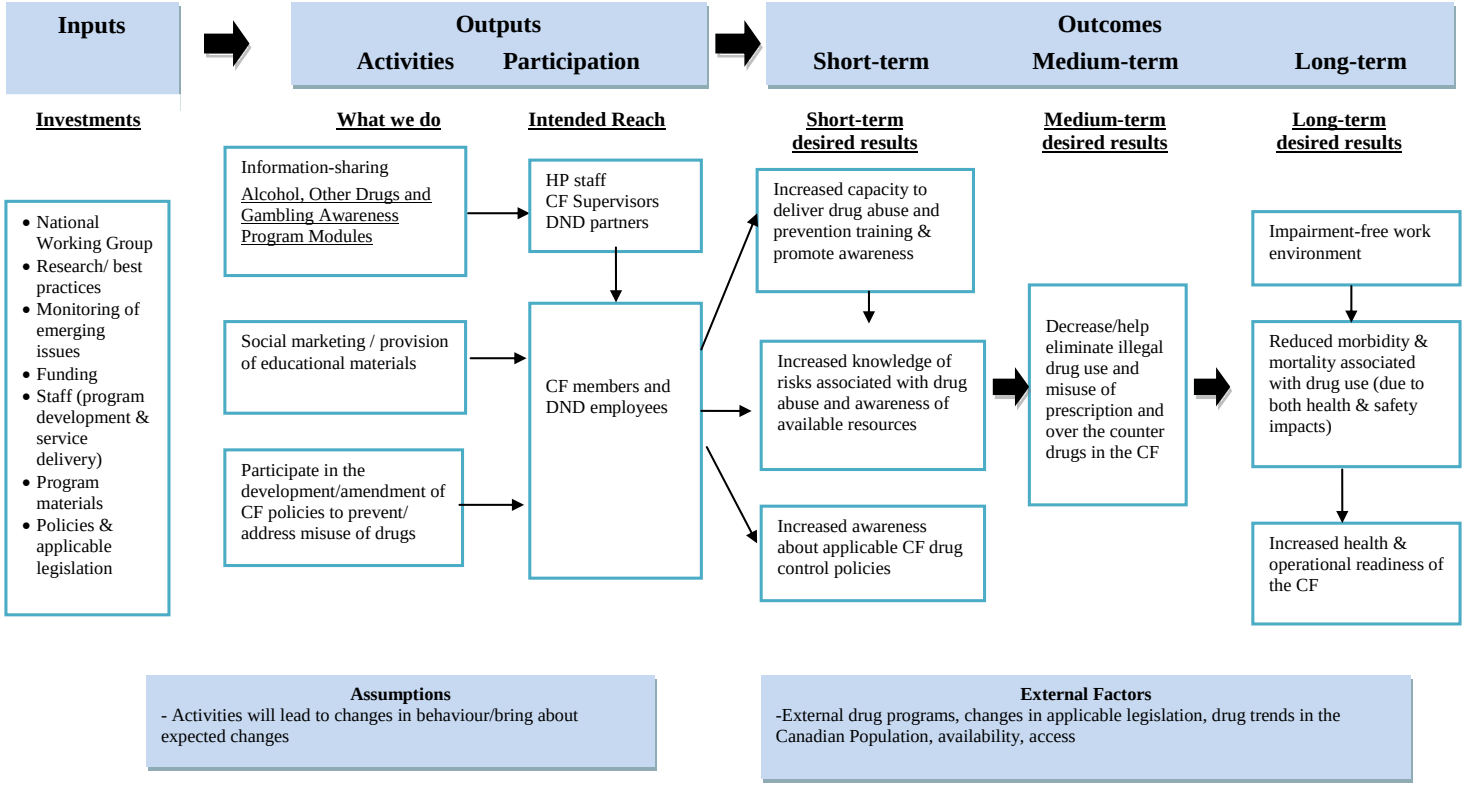
Alcohol

Situation: Results from the Canadian Forces (CF) Health and Lifestyle Information Survey (HLIS) (2008/09) indicate that close to 93% of CF members drink alcohol, with 46% exceeding the recommended daily limit of 2 standard drinks per day. In addition, 72% of CF members report binge drinking, and 20% report a score of 8 or more on the WHO AUDIT scale, which indicates a probability of hazardous alcohol consumption. Alcohol misconduct means any conduct, other than a conduct deficiency involving alcohol, that is an offence under the *Criminal Code* or the Code of Service Discipline that includes the consumption or influence of alcohol as an element of the offence or as a contributing factor, including, but not limited to, the following offences: impaired driving; impaired driving causing bodily harm or death; refusing to comply with a demand to provide a breath or blood sample; drunkenness under section 97 of the *National Defence Act* or an offence under QR&O article 19.04, *Intoxicants*, if dealt with at court martial, or at summary trial if a court martial election was given; and stealing, assault or sexual assault



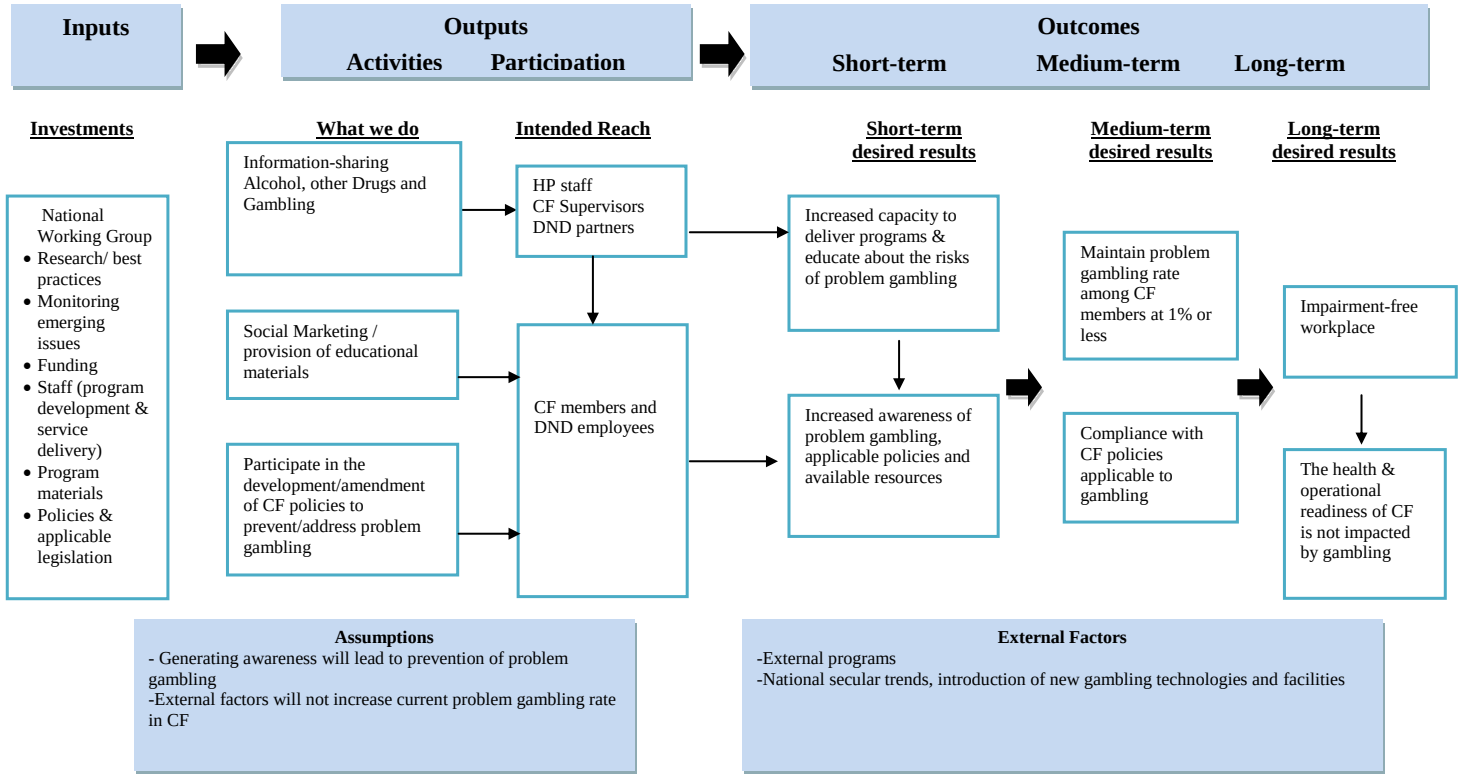
Drug Use

Situation: The CF is committed to an impairment-free workforce by providing the appropriate tools and information to reduce or eliminate the drug-risk behaviours of CF members. The use of illegal drugs and the misuse of prescription and over the counter drugs are prohibited. The HLIS 2008/09 survey found that 87.4% CF Personnel reported no use at all in the past 12 months with 79.5% reported never using illegal drugs in their lifetime and 18.1% reported using less since joining the CF. Of those CF members that reported illicit drug use 10.1% reported using one type of drug in the past 12 months, 2.5% reported using two or more non-medicinal drugs, 3.2% reported marijuana or hashish and 17% reported having worked with a member known to be taking drugs in garrison or on exercise. Substance abuse is a concern in the CF as it can impact on health and safety, job performance, absenteeism and benefits, liability, and the public image of the CF. In terms of non prescription medication/over-the-counter the two most commonly reported as being used were pain relievers 76% and cough/cold remedies 63%. The extent to which abuse of prescription and over the counter drugs is occurring in the CF is currently unknown.



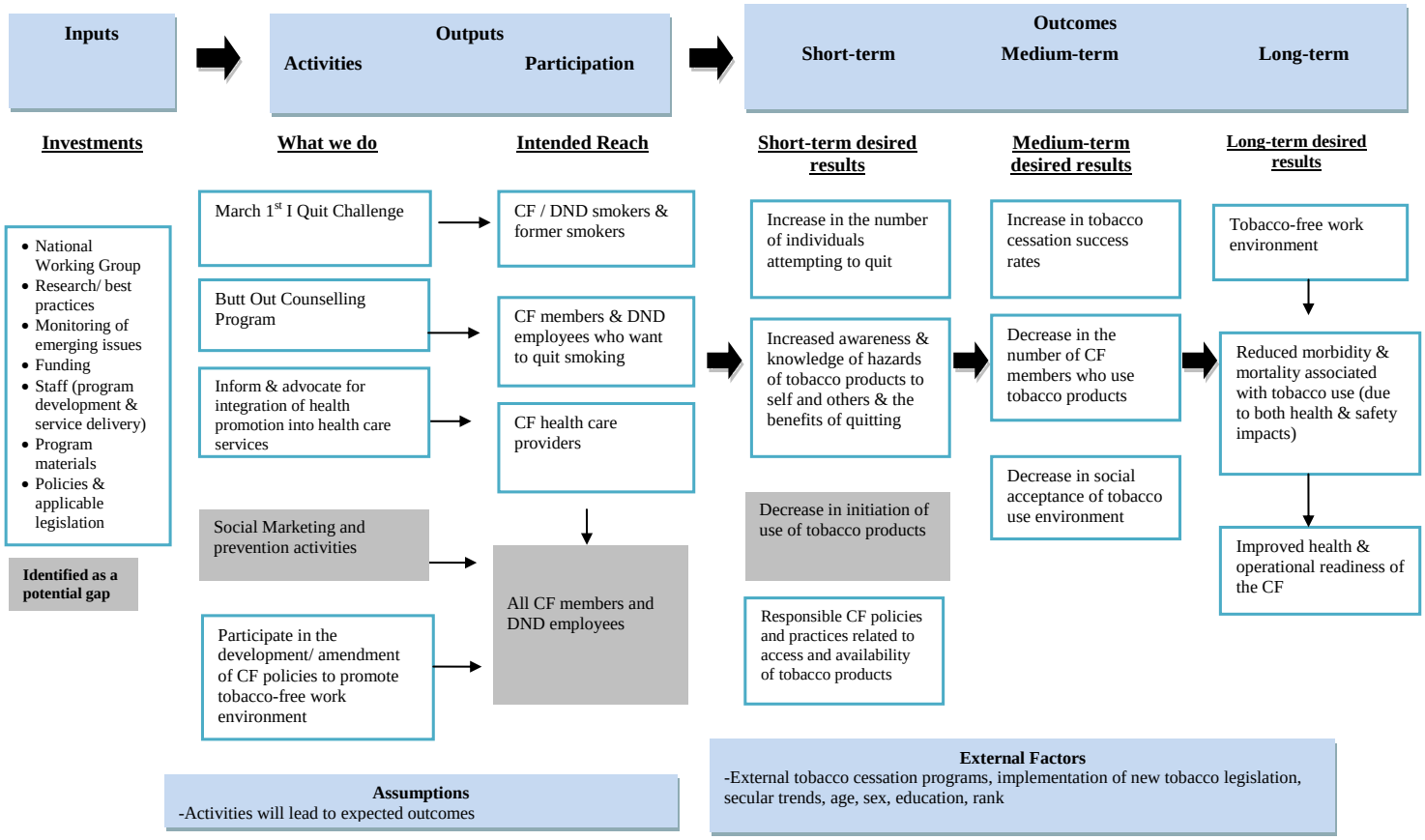
Gambling

Situation: There is currently a low reported prevalence of problem gambling in the CF. According to the results of the HLIS 2008/09 reported that: 83% CF members participated in some type of gambling in the past 12 months with the most popular being lotteries followed by instant win/scratch tickets. The frequency of problem gambling reported among personnel was 0.6%using the Problem Gambling Severity Index (PGSI), from the Canadian Problem Gambling Index (CPGI).The gambling industry has changed in the last 20 years and there is now an increase in internet/online gambling. There is also a concern from a security and safety point of view regarding the use of DND equipment for gambling purposes. The goal is to maintain a proactive approach to prevent problem gambling from becoming an issue in the CF, especially with the introduction of new gambling technologies.



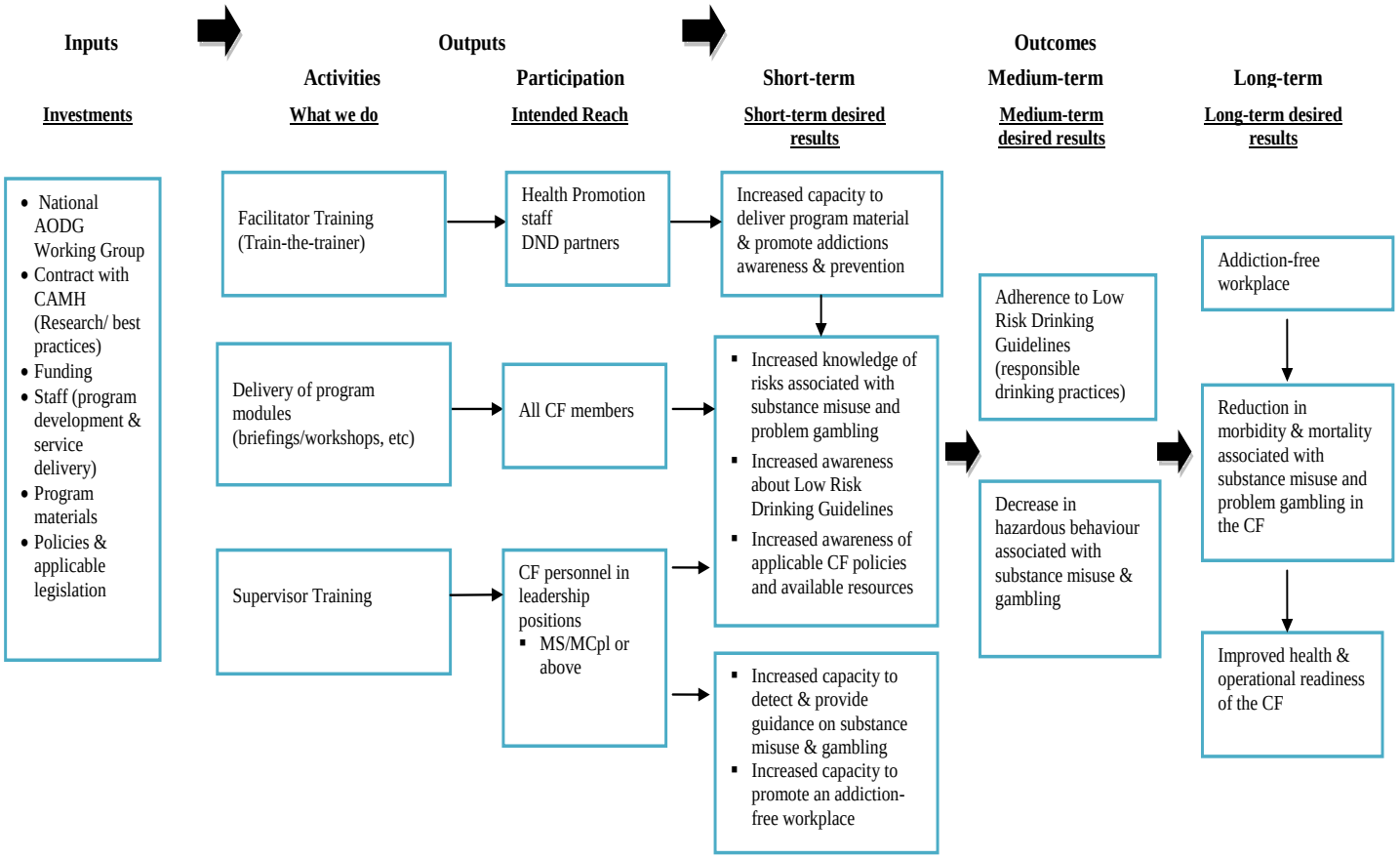
Tobacco Use

Situation: Tobacco use is a major health and safety hazard. Results from the CF HLIS 2008/09 indicate that less than one quarter approximately 23% of CF personnel are smokers and there has been an overall decrease in daily and occasional smoking between 2004 and 2008/09 in the CF population. What is a concern is those members who reported using tobacco products 24.5% reported that they started smoking after they joined the CF and 80% of CF smokers have increased or re-started smoking since joining the CF: 43% while on deployment.



Appendix B: Alcohol, Other Drugs and Gambling Awareness Program Modules

[Sub-logic Model]

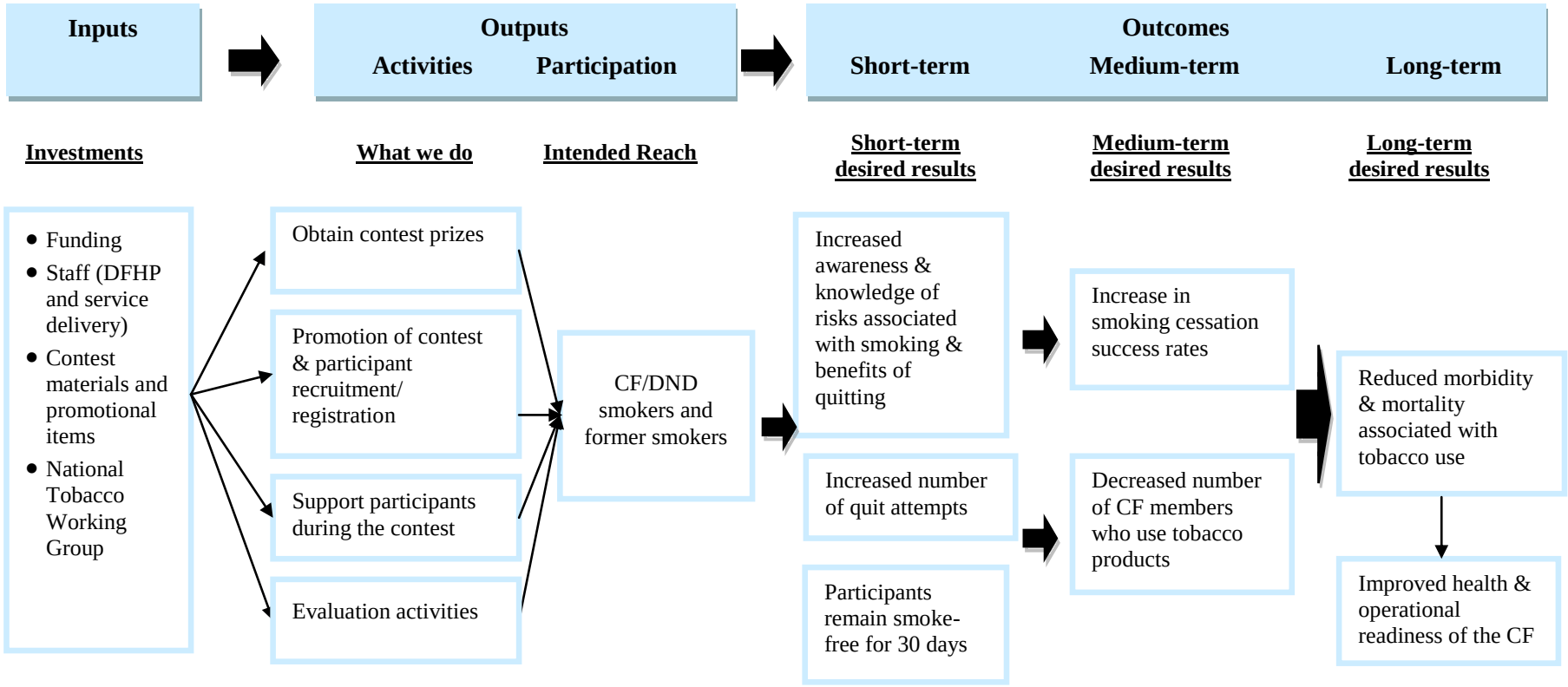


Appendix C: Evaluation Matrix – AODGA Supervisor Training Course

The table below presents the evaluation questions, potential indicators, methods, and data sources for the evaluation.

Evaluation Focus	Evaluation Question	Potential Indicators	Methods/Data Sources	Timing & Responsibility for Data Collection
Implementation	Are CF Supervisors being trained as planned? Why or why not? Should the amount of training, the timing of training, or the training delivery be changed in order to achieve intended outcomes?	– # of training courses; # of supervisors trained; training completed according to plan – Implementation objectives met – Attendance rates – Evidence of challenges – Evidence of chain of command support – Demand for training	– Instructor/trainer feedback (Trainer report forms) – HRMS – Health Promotion records – Focus group (potential use of AODGA National Working Group meeting)	– After each training course (HP staff) – Annually (or as needed)
Levels 1 and 2 of TKM: – Assessing supervisor satisfaction with training, and – Measuring acquisition of skill/knowledge (learning)	Are CF personnel in supervisory positions better equipped/prepared to recognize and manage issues pertaining to drug use, alcohol misuse, and gambling problems after they received supervisor training?	– Supervisors who attended training report that they are more confident to detect and deal with AODGA issues – Reported change in knowledge & attitudes – Perceived utility of training	– Pre and post training questionnaire (anonymous) – Learner evaluation activities/Course assessment	– In classroom; before and after each course – In classroom; throughout course – Course instructor
Level 3 of TKM: Change in behaviour / transfer of learning as a result of the training course	To what extent are supervisors applying the training and promoting an addiction-free workplace?	– # of supervisor requests for AODGA briefings/materials – Strategies implemented by supervisor to promote addiction-free workplace – Increase in # of cases referred to Base Addiction Counsellors (BAC) by supervisors – # of administrative actions – Evidence that social norm supports an addiction-free workplace *Challenge: linking these back to the training course*	– Post-training survey (6 or 12 months following training) – Health Promotion records – BAC records – Administrative actions database – HLIS	– DFHP staff – Timing for post-training follow-up survey to be determined

Appendix D: March 1st, I Quit! Challenge



Assumptions

- Incentives will enhance participation and motivation to quit
- 30 days of abstinence will lead to higher rates of long-term cessation

External Factors

- Secular trends, changes in applicable legislation/policies, external tobacco cessation programs, other tobacco cessation aids, age, sex, education, rank

Appendix E: Evaluation Matrix – March 1st, I Quit! Challenge

The table below presents the evaluation questions, potential indicators, methods, and data sources for the evaluation.

Evaluation Questions	Potential Indicators	Methods/Data Sources	Time /OPI
Reach			
Is the March 1st, I Quit! Challenge reaching the intended target population? Why or why not? Should more be done to increase participation in the contest?	• Reach (Ratio of # of participants divided by estimated # of smokers in the CF) • # of registered smokers meets identified goal of 1320 individuals • # registered participants (smokers, former smokers) • Level of awareness of the contest amongst CF members • Evidence that certain target groups are being missed	• Registration forms • HLIS • Feedback from Health Promotion staff	DFHP
Outcomes			
To what extent has the challenge helped smokers to make a serious quit attempt (e.g. 24 hours or more of non-use with the intention of quitting)?	• Number of quit attempts for 24 hours or more • Number of quit attempts is comparable to other quit and win contests	• Participant follow-up survey (Self-report) • Literature review	1 year post-contest
Did participants remain smoke free for – • the duration of the challenge (i.e. 30 days)? • 12 months?	• Quit rates are higher than those among other quit and win contests and/or among general Canadian population • 25% of registrants remain smoke-free for at least 12 months	• Participant follow-up survey (Self-report) • CTUMS	1 year post-contest
Was there a change in consumption of tobacco products following the challenge?	• Change in smoking behaviour before and after the challenge	• Registration form • Participant follow-up survey (Self-report)	1 year post-contest
Resources/Cost-effectiveness			
What are the program costs? Are the resources appropriate? Are the costs reasonable relative to the (perceived) benefits of the challenge?	• Cost/participant and cost/quitter are less than costs of morbidity /mortality associated with tobacco use • Cost/quitter is similar to average cost from other quit and win contests • Opinions of program staff and participants of contest utility/ benefits	• Contest budget • Focus groups • Literature reviews